



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic)



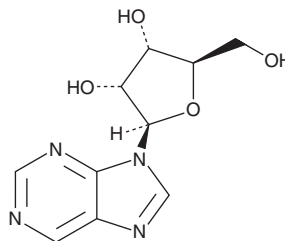
PRODUCT INFORMATION



Nebularine

Item No. 31329

CAS Registry No.: 550-33-4
Formal Name: 9-β-D-ribofuranosyl-9H-purine
Synonyms: Desaminoadenosine, NSC 65423, Purine riboside, Purinosine, Ribosylpurine
MF: C₁₀H₁₂N₄O₄
FW: 252.2
Purity: ≥98%
UV/Vis.: λ_{max}: 244, 264 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years
Item Origin: Synthetic



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Nebularine is supplied as a crystalline solid. A stock solution may be made by dissolving the nebularine in the solvent of choice, which should be purged with an inert gas. Nebularine is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of nebularine in these solvents is approximately 30 and 15 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of nebularine can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of nebularine in PBS, pH 7.2, is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Nebularine is a purine ribonucleoside and an adenosine analog that has been found in *L. nebularis* and has diverse biological activities.¹⁻⁵ It reduces herpes simplex virus 1 (HSV-1) viral plaque formation in Vero cells (IC₅₀ = 0.6 μM) and is active against *M. phlei*, *M. avium*, *M. tuberculosis*, and *B. abortus*.^{1,2} Nebularine (10 and 100 μM) is cytotoxic to COS-7 cells and induces pyknosis in mouse sarcoma 180 cells and mouse embryonic skin explants in a concentration-dependent manner.^{3,4} It inhibits root growth of wheat seedlings when used at concentrations ranging from 0.1 to 2 mM.² Nebularine also inhibits adenosine deaminase (K_i = 16 μM).⁵

References

1. Julián-Ortiz, J.V., Gálvez, J., Muñoz-Collado, C., *et al.* Virtual combinatorial syntheses and computational screening of new potential anti-herpes compounds. *J. Med. Chem.* **42**(17), 3308-3314 (1999).
2. Brown, E.G. and Konuk, M. Plant cytotoxicity of nebularine (purine riboside). *Phytochemistry* **37**(6), 1589-1592 (1994).
3. Tkacz, K., Cioroch, M., Skladanowski, A.C., *et al.* The cytotoxic effect of purine riboside on COS-7 cells. *Purine and Pyrimidine Metabolism in Man X. Advances in Experimental Medicine and Biology*. Zoref-Shani, E. and Sperling, O., Springer. (2000).
4. Bieseke, J.J., Slautterback, C., and Margolis, M. Unsubstituted purine and its riboside as toxic antimetabolites in mouse tissue cultures. *Cancer* **8**(1), 87-96 (1955).
5. Shewach, D.S., Krawczyk, S.H., Acevedo, O.L., *et al.* Inhibition of adenosine deaminase by azapurine ribonucleosides. *Biochem. Pharmacol.* **44**(9), 1697-1700 (1992).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 09/03/2020

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM